

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-4, 6, 8-11, 13-22, 24, and 25 are presented for examination. Claim 5 was previously canceled without prejudice or disclaimer and Claims 7, 12, and 23 are presently canceled without prejudice or disclaimer. Claims 1-4, 6, 8-11, 13-22, 24, and 25 have been amended and new Claims 24 and 25 have been added to provide the breadth of protection to which Applicant is entitled without the introduction of any new matter. Note the disclosures of the previously presented claims as well as the specification at page 16, lines 21-25 and 26-32, page 17, lines 4-7, page 19, lines 2-5, page 20, line 23-page 21, line 2, and page 21, lines 6-24, for example

The outstanding Office Action includes a requirement for corrected drawings, an objection to Claims 1-4 and 6-23 under 37 CFR §1.75, a rejection of Claims 1-4 and 6-23 under the first paragraph of 35 U.S.C. §112, a rejection of Claims 1-4 and 6-23 under the second paragraph of 35 U.S.C. §112, a rejection of Claims 1-4, 6-14, 16, and 18-23 under 35 U.S.C. §102(e) as being anticipated by Moher (U.S. Patent No. 6,161,209), and a rejection of Claim 17 under 35 U.S.C. §103(a) as unpatentable over Mohar.

It is believed that the requirement for corrected drawings should be withdrawn in view of the letter submitting corrected drawings and the included corrected drawings all filed February 10, 2004, as evidenced by the attached copy of that letter, the attached copy of the submitted corrected drawings, and the attached copy of the date stamped filing receipt evidencing the filing thereof.

The outstanding Action now objects (under 37 CFR §1.75) to Claims 1-4 and 6-23 for

some of the same reasons that these claims are rejected under the second paragraph of 35 U.S.C. §112 as being allegedly unclear as to the manner the Claim 1 “elementary coding steps,” “elementary decoding steps,” and “characteristic quantity” are “associated” with corresponding respective “interleaving,” “deinterleaving,” and “decoding” steps.

The rejection of Claims 1-4 and 6-23 under the second paragraph of 35 U.S.C. §112 on exactly this same rationale demonstrates the improper nature of this duplicative 37 CFR §1.75 objection. In this regard, MPEP §706.01 makes it clear that objections are limited to formal matters, like the lack of a period in Claim 8 and the spelling error in Claim 13, not substantive matters relating to a refusal to grant claims on the merits. As it is clear that the objections raised as to Claims 1-4 and 6-23 under 37 CFR §1.75 are directed to the merits and reflect a refusal to grant claims for some of the same substantive reasons urged in the rejection under the second paragraph of 35 U.S.C. §112, the improper use of a formal matter only objection to Claims 1-4 and 6-23 under 37 CFR §1.75 is traversed.

In addition, the objection to Claim 8 as to the missing period and to Claim 13 as to the spelling error are believed to be moot in view of the corrections included in the amendments to the claims. The objection to Claims 7, 12, and 23 is further considered to be moot in view of the cancellation of Claims 7, 12, and 23.

Turning to the reasons offered in refusing to allow Claims 1-4 and 6-23 that assert indefiniteness (under the second paragraph of 35 U.S.C. §112 and the corresponding language of 37 CFR §1.75), it is noted that the rationale of the outstanding Action (at pages 3-4 asserting an objection and at pages 5-6 asserting a rejection) again attempts to force the Applicant to adopt the PTO interpretation of the invention even though this attempt would

lead to claims including language contrary to the specific disclosure in the specification.

In this regard, page 3, line 16-page 4, line 7 of the specification describe how “a number of simple codes, referred to as elementary codes, with the intervention of permutation operations, referred to as interleavings, which modify the order in which the data are taken into account by each of the simple codes” are associated in terms noted as “concatenation,” see page 3, lines 19-24 of the specification in particular. Clearly, the interleaving and the elementary coding are separate operations as described, yet the PTO attempts to force Applicant to violate the first paragraph of 35 U.S.C. §112 in terms of suggesting inaccurate claim language that would recite the elementary coding steps as “including a plurality of interleaving steps” as set forth on pages 3 and 5 of the outstanding Action.

Besides this improper attempt to introduce unsupported claim language, the PTO violates established case law as noted in the last response with regard to In re Borkowski, 162 USPQ 642, 645 (CCPA 1970) that makes it clear that it is improper for the PTO “to formulate a conclusion as to what he (the PTO) regards as the broadest invention supported by the disclosure, and then to determine whether appellant’s claims are broader than [that] conception of what ‘the invention’ is.”

Similarly, the change suggested as to the elementary decoders “including a plurality of deinterleaving steps” at pages 4 and 6 of the outstanding Action would also violate the written description requirement of the first paragraph of 35 U.S.C. §112 (in view of the conflict with the description at page 4, line 8-page 5, line 13, of the specification) as well as violating the principles noted above as to Borkowski.

Pages 3-4 and 5-6 of the outstanding Action argue it to be unclear as to how various

claim elements are “associated” when analyzing the rejected claims in a vacuum and ignoring the requirements of the case law and MPEP guidelines that prohibit such an analysis. See MPEP §2173.02 that is specific to questions arising under the second paragraph of 35 U.S.C. §112 and **REQUIRES** that the definiteness of the claims must be analyzed in light of the contents of the specification and knowledge in the art and never in a vacuum. When analyzed as required by the courts, there is no question that presently amended pending Claims 1-4, 6, 8-11, 13-22, 24, and 25 all are clearly definite.

In this last regard, MPEP §2111, relied upon in the outstanding Action, does not relate to how the claims are to be analyzed as to meeting the requirements of the second paragraph of 35 U.S.C. §112 or the similar requirement in 37 CFR §1.75; instead, it relates to the claim interpretation used to determine the broadest reasonable meaning of the claim language in terms of scope of coverage, not definiteness. Even under these circumstances, the broadest reasonable interpretation must still be interpreted in a manner consistent with the disclosure and prior art usages, note In re Cortright, 49 USPQ 2d 1464, 1478 (Fed. Cir. 1999).

Moreover, the instructions of MPEP §2172.01 (Rev. 1, Feb. 2003) requiring a determination of the “essential elements of the invention” by reviewing “the invention **as defined by applicant(s) in the specification**” (emphasis added) has again been ignored as to the improper indefiniteness analysis offered in the outstanding Action seeking to rely on MPEP §2111 instead of the noted MPEP sections pertinent to the analysis to be performed with respect to definiteness. The further above-noted directives of MPEP §2173.02 (that claims are to be analyzed as to meeting the threshold requirement of clarity and precision in light of the contents of the specification and never in a vacuum) must be used as must the

admonition of MPEP §2173.04 that breadth of claim language is not to be equated to indefiniteness.

If the outstanding Action analysis properly considered the disclosure of page 13 of the specification, for example, as to the well known nature of elementary coders using interleaving, it should have been understood that elementary coding and interleaving are not new elements and that the artisan fully understands what is involved in elementary encoding steps being “associated” with interleaving steps. Just as the Artisan is well aware of the association of elementary encoding steps with interleaving steps, that artisan is likewise aware of how the decoding procedure must work with elementary decoders and associated de-interleaving corresponding to the interleaving described at pages 14-15 of the specification, for example. Thus, the associations between elementary encoding with interleaving and the association between elementary decoding with de-interleaving as well as the known manner that the de-interleaving corresponds to the interleaving are elements workers of ordinary skill could readily optimize for a given situation. Clearly these known relationships are not ones that need to be set forth in great detail in either the specification or claims.

Similarly, the specification describes the information from one elementary decoder being “transmitted” to another. While other words such as “outputted” and even the suggested “for use in” statement could also be used, the question is not one of determining which of all possible terms are preferred by the PTO; instead, the question is the definiteness of the term used. See the above noted requirements of MPEP §2173.02 that claims are to be analyzed as to meeting the threshold requirement of clarity and precision in light of the contents of the specification and never in a vacuum.

In this last regard, page 8 of the specification notes that “a quantity characteristic of the quality of a set of information items, at the output of the last elementary decoding operation” is the concern and this is what can be said to be “corresponding to the said set of weighted information items. The disclosure does not require limiting the statistical function associated with the characteristic quantity of concern to being simply “a statistical value for use in the elementary decoding steps” and this suggested change to Claim 1 at page 6 of the outstanding Action is also clearly improper. The statistical nature of the function is further clear from the description of the mean example at page 8, lines 6-16, of the specification, a point addressed below as to the first paragraph rejection.

Finally, Applicant notes that Claim 1 now recites the decoded characteristic quantity is the statistical quantity and that this recitation has support at page 10, lines 3-6 of the specification. Moreover, the removal of the Claim 1 recitals of “elementary coding steps,” “elementary decoding steps,” and a “characteristic quantity” being “associated” with corresponding respective “interleaving,” “deinterleaving,” and “decoding” steps renders these objections moot.

In light of the foregoing, withdrawal of the rejection of Claims 1-4, 6, 8-11, and 13-22 under the second paragraph of §112 and the refusal to allow these claims based upon 37 CFR §1.75 are respectfully submitted to be in order.

The rejection of Claims 7, 12, and 23 under the first paragraph of 35 U.S.C. §112 is believed to be moot in view of the cancellation of these claims.

The rejection of Claims 1-4, 6, 8-11, and 13-22 under the first paragraph of 35 U.S.C. §112 is traversed as it is improperly founded on the belief that the specification must describe

the invention using the exact wording of the claims. This violates MPEP §2163.01 that points out that “[t]he subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the written description requirement” and the similar pronouncement in In re Wertheim, 191 USPQ 90, 96 (CCPA 1976) as follows:

The function of the description requirement is to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him; how the specification accomplishes this is not material. *In re Smith*, 481 F.2d 910, 178 USPQ 620 (CCPA 1973), and cases cited therein. It is not necessary that the application describe the claim limitations exactly, *In re Lukach, supra*, but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations. *In re Smythe*, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973).

MPEP§2163.07(a) further points out that inherent functions being performed are part of the disclosure even if the specification does not explicitly name them. The statistical function nature of the above noted discussions at page 8, lines 6-16, of the specification is clear as it also is relative to the further discussion at lines 17-26 of this page. Note further page 10, lines 3-6 discussing the “statistical quantity” and the function noted as an example at page 21, lines 21-24. Moreover, the rewording of amended Claim 1 leaves no doubt that the literal support at page 10, lines 3-6 overcomes this rejection.

Accordingly, the rejection of Claims 1-4, 6, 8-11, and 13-22 under the first paragraph of 35 U.S.C. §112 should be withdrawn.

With regard to the rejection of Claims 1-4, 6-14, 16, and 18-23 under 35 U.S.C. §102(e) as being anticipated by Moher, the cancellation of Claims 7, 12, and 23 renders their rejection on this grounds clearly moot.

With further regard to Claims 1-4, 6, 8-11, 13, 14, 16, and 18-22, these claims all clearly require the Claim 1 “determined decoded information quality parameter” to be “a numerical scalar or an integer number representing a probable number of errors existing in a set of decoded information items” which is subject matter not taught by Mohar. Accordingly, this rejection of Claims 1-4, 6, 8-11, 13, 14, 16, and 18-22 is traversed.

The rejection of Claim 17 under 35 U.S.C. §103(a) as unpatentable over Mohar is traversed for the reasons noted above as Claim 17 depends on Claim 1 and includes the above-noted limitations. In addition the rejection is improperly based on assertions lacking the required supporting evidence as to the matters asserted as well as proper evidence of motivation. See In re Lee, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002) has emphasized the need for both examiners and the board to provide evidence, not mere unsupported opinion, as follows:

In finding relevant facts, in assessing the significance of the prior art, and in making the ultimate determination of the issue of obviousness, the examiner and the Board are presumed to act from this viewpoint [that of the person of ordinary skill in the art to which the subject matter pertains]. Thus when they rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record. (Emphasis added).

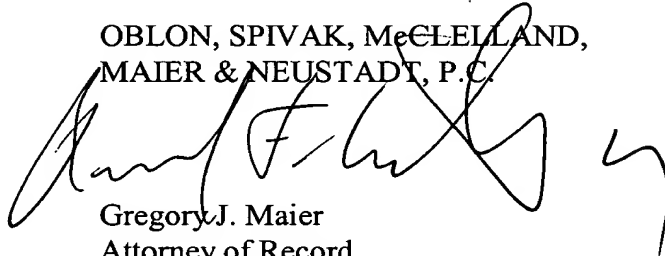
As new Claims 24 and 25 depend from Claim 1, they are also believed to patentably define over Mohar for the same reasons Claim 1 does as well as because of the subject matter these claims add that is also not taught or suggested by Mohar.

Appln. No. 09/756,778
Reply to Office Action of 04/15/04

As no other issues are believed to remain outstanding relative to this application, it is believed to be clear that this application is in condition for formal allowance and an early and favorable action to this effect is, therefore, respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read 'Gregory J. Maier', is written over the printed name of the attorney.

Gregory J. Maier
Attorney of Record
Registration No. 25,599
Raymond F. Cardillo, Jr.
Registration No. 40,440

Customer Number

22850

(703) 413-3000
(703) 413-2220 (fax)
GJM:RFC/jmp